## South Plains College Common Course Syllabus: NCBM 0105 Revised December 2019

**Department:** Mathematics, Engineering, and Computer Science **Discipline:** Mathematics

Course Number: NCBM 0105 Course Title: Developmental Mathematics

Campuses: Levelland, Reese, Plainview, and Lubbock Center Available Formats: Internet

**Course Description:** Topics in mathematics, such as arithmetic operations, basic algebraic concepts and notation, geometry. And real and complex number systems are taught to prepare students for MATH 0315, MATH 0332, MATH 0337, or MATH 0342.

Prerequisite: An ABE score on the TSIA. Credit: 1 Lecture: 0 Lab: 3

Textbook: None, use of EdReady required

Supplies: Please see the instructor's course information sheet for specific supplies.

This course partially satisfies a Core Curriculum Requirement: No

Student Learning Outcomes: Upon completion of this course and receiving a passing grade, the student will be able to:

- 1. Use appropriate symbolic notation and vocabulary to communicate, interpret, and explain mathematical concepts.
- 2. Define, represent, and perform operations on real numbers, applying numeric reasoning to investigate and describe quantitative relationships and solve real world problems in a variety of contexts.
- 3. Use algebraic reasoning to solve problems that require ratios, rates, percentages, and proportions in a variety of contexts using multiple representations.
- 4. Apply algebraic reasoning to manipulate expressions and equations to solve real world problems.
- 5. Use graphs, tables, and technology to analyze, interpret, and compare data sets.
- 6. Construct and use mathematical models in verbal, algebraic, graphical, and tabular form to solve problems from a variety of contexts and to make predictions and decisions.

Student Learning Outcomes Assessment: None

**Course Evaluation:** EdReady will evaluate the mastery of each student and give a score between 0 and 100.

**Attendance Policy:** Please see the instructor's course information sheet for specific attendance requirements.

Plagiarism violations include, but are not limited to, the following:

- 1. Turning in a paper that has been purchased, borrowed, or downloaded from another student, an online term paper site, or a mail order term paper mill;
- 2. Cutting and pasting together information from books, articles, other papers, or online sites without providing proper documentation;
- 3. Using direct quotations (three or more words) from a source without showing them to be direct quotations and citing them; or
- 4. Missing in-text citations.

Cheating violations include, but are not limited to, the following:

- 1. Obtaining an examination by stealing or collusion;
- 2. Discovering the content of an examination before it is given;
- 3. Using an unauthorized source of information (notes, textbook, text messaging, internet, apps) during an examination, quiz, or homework assignment;
- 4. Entering an office or building to obtain an unfair advantage;
- 5. Taking an examination for another;
- 6. Altering grade records;
- 7. Copying another's work during an examination or on a homework assignment;
- 8. Rewriting another student's work in Peer Editing so that the writing is no longer the original student's;
- 9. Taking pictures of a test, test answers, or someone else's paper.

COVID Syllabus Statement: It is the policy of South Plains College for the Spring 2021 semester that as a condition of oncampus enrollment, all students are required to engage in safe behaviors to avoid the spread of COVID-19 in the SPC community. Such behaviors specifically include the requirement that all students properly wear CDC-compliant face coverings while in SPC buildings including in classrooms, labs, hallways, and restrooms. Failure to comply with this policy may result in dismissal from the current class session. If the student refuses to leave the classroom or lab after being dismissed, the student may be referred to the Dean of Students on the Levelland campus or the Dean/Director of external centers for Student Code of Conduct Violation. Students who believe they have been exposed or may be COVID-19 positive, must contact Health Services, DeEtte Edens, BSN, RN at (806) 716-2376 or dedens@southplainscollege.edu.

**Student Code of Conduct Policy**: Any successful learning experience requires mutual respect on the part of the student and the instructor. Neither instructor nor student should be subject to others' behavior that is rude, disruptive, intimidating, aggressive, or demeaning. Student conduct that disrupts the learning process or is deemed disrespectful or threatening shall not be tolerated and may lead to disciplinary action and/or removal from class.

**Diversity Statement:** In this class, the teacher will establish and support an environment that values and nurtures individual and group differences and encourages engagement and interaction. Understanding and respecting multiple experiences and perspectives will serve to challenge and stimulate all of us to learn about others, about the larger world and about ourselves. By promoting diversity and intellectual exchange, we will not only mirror society as it is, but also model society as it should and can be.

**Disability Statement:** Students with disabilities, including but not limited to physical, psychiatric, or learning disabilities, who wish to request accommodations in this class should notify the Disability Services Office early in the semester so that the appropriate arrangements may be made. In accordance with federal law, a student requesting accommodations must provide acceptable documentation of his/her disability to the Disability Services Office. For more information, call or visit the Disability Services Office at Levelland (Student Health & Wellness Office) 806-716-2577, Reese Center (Building 8) 806-716-4675, or Plainview Center (Main Office) 806-716-4302 or 806-296-9611.

**Nondiscrimination Policy:** South Plains College does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs and activities. The following person has been designated to handle inquiries regarding the non-discrimination policies: Vice President for Student Affairs, South Plains College, 1401 College Avenue, Box 5, Levelland, TX 79336. Phone number 806-716-2360.

**Title IX Pregnancy Accommodations Statement:** If you are pregnant, or have given birth within six months, Under Title IX you have a right to reasonable accommodations to help continue your education. To <u>activate</u> accommodations you must submit a Title IX pregnancy accommodations request, along with specific medical documentation, to the Director of Health and Wellness. Once approved, notification will be sent to the student and instructors. It is the student's responsibility to work with the instructor to arrange accommodations. Contact the Director of Health and Wellness at 806-716-2362 or email cgilster@southplainscollege.edu for assistance.

Campus Concealed Carry: Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in South Plains College buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and South Plains College policy, license holders may not carry a concealed handgun in restricted locations. For a list of locations and Frequently Asked Questions, please refer to the Campus Carry page at: <a href="http://www.southplainscollege.edu/campuscarry.php">http://www.southplainscollege.edu/campuscarry.php</a> Pursuant to PC 46.035, the open carrying of handguns is prohibited on all South Plains College campuses. Report violations to the College Police Department at 806-716-2396 or 9-1-1.

**SPC Bookstore Price Match Guarantee Policy:** If you find a lower price on a textbook, the South Plains College bookstore will match that price. The difference will be given to the student on a bookstore gift certificate! The gift certificate can be spent on anything in the store.

If students have already purchased textbooks and then find a better price later, the South Plains College bookstore will price match through the first week of the semester. The student must have a copy of the receipt and the book has to be in stock at the competition at the time of the price match.

The South Plains College bookstore will happily price match BN.com & books on Amazon noted as *ships from and sold by Amazon.com*. Online marketplaces such as *Other Sellers* on Amazon, Amazon's Warehouse Deals, *fulfilled by* Amazon, BN.com Marketplace, and peer-to-peer pricing are not eligible. They will price match the exact textbook, in the same edition

and format, including all accompanying materials, like workbooks and CDs.

A textbook is only eligible for price match if it is in stock on a competitor's website at time of the price match request. Additional membership discounts and offers cannot be applied to the student's refund.

Price matching is only available on in-store purchases. Digital books, access codes sold via publisher sites, rentals and special orders are not eligible. Only one price match per title per customer is allowed.

Note: The instructor reserves the right to modify the course syllabus and policies, as well as notify students of any changes, at any point during the semester.

## **Instructor Information:**

**Instructor:** Jennifer Bartlett

Office: Levelland Campus, Math Building Room 113

**Telephone:** (806) 716-2664

Email: jkbartlett@southplainscollege.edu

Office Hours:

Mon & Wed 10:40-11:40 in Levelland Math 113, Tues & Thurs 9:15-11:15 in Levelland Math 113, Friday 8:30-10:30 virtual on Zoom,

or by appointment face-to-face or zoom

Virtual Office Hours Zoom Link:

https://southplainscollege.zoom.us/j/97739016686

**Attendance:** The student will be required to communicate with the instructor at least **once** per week and work in EdReady for at least **two hours** per week for the duration of this course. Failure to do so will result in the student being dropped from the course.

**Grading:** This course will be graded on a pass/fail basis. Once the student has completed the course with at least 90% mastery, the student will have earned a grade of P, indicating "passing" for the course. If the student does not achieve a 90% level of mastery, the student will have earned a grade of F and will be required to complete the course again.

**Supplies:** Access to a computer with an internet connection is required for this course.

## **Accessing the Course Diagnostic and Learning Modules:**

Creating an Account: First, the student will need to create an account at <a href="https://southplainscollege.edready.org">https://southplainscollege.edready.org</a>. Be sure that when you get to the EdReady website that it has the navy and orange SPC logo at the top. Here are the steps:

- 1. Go to this website and choose the "Get Started" option. If you already have an EdReady account, then choose the "Log In" option at the upper-right corner of the screen.
- 2. Complete the brief form on the "Sign Up for EdReady" screen.
- 3. After setting up a username and password, choose the "Enter a key to add goals" option. Your key for this course is **BartlettSpring21**.

Taking the Initial Diagnostic Test: Second, after creating the account, you will need to take the initial diagnostic test.

- Please allow at least one hour for this test. However, if you need more time or need to step away, there is an option to save and exit.
- After completing this initial diagnostic test, contact your instructor for next steps to complete the requirements for this course.
- You must have the Initial Diagnostic Test completed by January 22, 2021.

We will cover the following 11 Units that you will work on mastering in EdReady:

- 1) Whole Numbers Unit with 12 different topics
- 2) Fractions & Mixed Numbers Unit with 9 different topics
- 3) Decimals Unit with 5 different topics
- 4) Ratios, Rates, and Proportions Unit with 2 different topics
- 5) Percents Unit with 2 different topics
- 6) Real Numbers Unit with 9 different topics
- 7) Solving Equations Unit with 1 topic
- 8) Exponents and Polynomials Unit with 5 different topics
- 9) Factoring Unit with 5 different topics
- 10) Geometry Unit with 2 different topics
- 11) Radical Expression and Quadratic Equations Unit with 2 different topics

| Week | Day      | Date           | Lesson Topic / Assignment  |
|------|----------|----------------|--|
| 1    | Tues-Fri | January 19-22  | <ul> <li>The instructor will contact the student regarding initial steps in beginning this course.</li> <li>The student will receive the syllabus and setup an EdReady account.</li> <li>After receiving the goal key from the instructor, the student will complete the initial diagnostic test.</li> </ul>   |
| 2    | Mon-Fri  | January 25-29  | Master the 12 Topics in the Whole Numbers Unit  1. Place Value and Names for Whole Numbers 2. Rounding Whole Numbers 3. Comparing Whole Numbers 4. Adding Whole Numbers and Applications 5. Subtracting Whole Numbers and Applications 6. Estimation 7. Multiplying Whole Numbers and Applications 8. Diving Whole Numbers and Applications 9. Properties and Laws of Whole Numbers 10. The Distributive Property 11. Understanding Exponents and Square Roots 12. Order of Operations |
| 3    | Mon-Fri  | February 1-5   | Master the 9 Topics in the Fractions & Mixed Numbers Unit  1. Intro to Fractions and Mixed Numbers 2. Proper and Improper Fractions 3. Factors and Primes 4. Simplifying Fractions 5. Comparing Fractions 6. Multiplying Fractions and Mixed Numbers 7. Dividing Fractions and Mixed Number 8. Adding Fractions and Mixed Numbers 9. Subtracting Fractions and Mixed Numbers   |
| 4    | Mon-Fri  | February 8-12  | Master the 5 topics in the Decimals Unit  1. Decimals and Fractions 2. Ordering and Rounding Decimals 3. Adding and Subtracting Decimals 4. Multiplying and Dividing Decimals 5. Estimation with Decimals  |
| 5    | Mon-Fri  | February 15-19 | Master the 2 topics in the Ratios, Rates, and Proportions Unit  1. Simplifying Rations and Rates 2. Understanding Proportions  Master the 2 topics in the Percents Unit 1. Convert Percents, Decimals, and Fractions 2. Solving Percent Problems   |
| 6    | Mon-Fri  | February 22-26 | Master the 9 Topics in the Real Numbers Unit  1. Variables and Expressions 2. Integers 3. Rational and Real Numbers 4. Adding Integers   |

|    |         |                  | 3_   |
|----|---------|------------------|--|
|    |         |                  | <ol> <li>Adding Real Numbers</li> <li>Subtracting Real Numbers</li> <li>Multiplying and Dividing Real Numbers</li> <li>Associative, Commutative, and Distributive Properties</li> <li>Order of Operations</li> </ol>       |
| 7  | Mon-Fri | March 1-5        | Master the 1 topic in the Solving Equations Unit 1. Solving One-Step Equations Using Properties of Equality  |
| 8  | Mon-Fri | March 8-12       | Master the 5 topics in Exponents and Polynomials Unit  1. Intro to Single Variable Polynomials  2. Adding and Subtracting Polynomials  3. Multiplying Polynomials  4. Multiplying Special Cases  5. Dividing by a Monomial |
|    | Mon-Fri | March 15-19      | Spring Break   |
| 9  | Mon-Fri | March 22-26      | Master the 5 topics in the Factoring Unit  1. Greatest Common Factor  2. Factoring Trinomials  3. Factoring Special Cases  4. Special Cases Cubes  5. Solving Quadratic Equations by Factoring                             |
| 10 | Mon-Fri | March 29-April 2 | Master the 2 topics in the Geometry Unit  1. Figures in 1 and 2 Dimensions 2. Perimeter and Area   |
| 11 | Mon-Fri | April 5-9        | Master the 2 topics in the Radical Expressions and Quadratic Equations 1. Complex Numbers 2. Operations with Complex Numbers   |
| 12 | Mon-Fri | April 12-16      | <ul> <li>Catch-up Week</li> <li>This course must be completed by the end of this week in order to register for summer/fall classes.</li> </ul>   |